

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 01/16949A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01M12/06 H01M4/42 H01M6/12 C22C18/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01M C22C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^a	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 168 018 A (YOSHIZAWA HIROSHI ET AL, KATANO, JP) 1 December 1992 (1992-12-01) cited in the application column 3, line 22 - line 63 ---	1-5, 12, 13
Y	US 5 306 580 A (MANSFIELD JR ROBERT N ET AL, VALLEY VIEW, US) 26 April 1994 (1994-04-26) cited in the application column 4, line 34 -column 6, line 15 ---	1-5, 12, 13 -/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- *&* document member of the same patent family

Date of the actual completion of the International search

7 September 2001

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19/09/2001

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INTERNATIONAL SEARCH REPORT

Int'l Application No
PCT/US 01/16949

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DATABASE WPI Section Ch, Week 199147 Derwent Publications Ltd., London, GB; Class L03, AN 1991-343943 XP002177021 & JP 03 230476 A (MITSUI MINING & SMELTING CO), 14 October 1991 (1991-10-14) abstract</p> <p>-----</p> <p>PATENT ABSTRACTS OF JAPAN vol. 011, no. 343 (E-555), 10 November 1987 (1987-11-10) & JP 62 123653 A (MITSUI MINING & SMELTING CO LTD; OTHERS: 01), 4 June 1987 (1987-06-04) abstract</p> <p>-----</p> <p>DATABASE WPI Section Ch, Week 199952 Derwent Publications Ltd., London, GB; Class L03, AN 1999-606550 XP002177022 & JP 11 265715 A (DOWA MINING CO LTD), 28 September 1999 (1999-09-28) abstract</p> <p>-----</p>	4-7
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INTERNATIONAL SEARCH REPORT

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PCT/US 01/16949

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US 5168018	A	01-12-1992		JP 2068417 C JP 4026061 A JP 7107857 B JP 2808822 B JP 4026062 A JP 2068418 C JP 4026064 A JP 7107858 B JP 1967640 C JP 4026066 A JP 6097611 B JP 2754865 B JP 4026067 A AU 622588 B AU 7701791 A CA 2042549 A,C DE 69111686 D DE 69111686 T EP 0457354 A		10-07-1996 29-01-1992 15-11-1995 08-10-1998 29-01-1992 10-07-1996 29-01-1992 15-11-1995 18-09-1995 29-01-1992 30-11-1994 20-05-1998 29-01-1992 09-04-1992 28-11-1991 18-11-1991 07-09-1995 21-03-1996 21-11-1991
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JP 3230476	A	14-10-1991		NONE		
JP 62123653	A	04-06-1987		NONE		
JP 11265715	A	28-09-1999		NONE		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU03/01165

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: H01M 6/06, 6/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC⁷ H01M AS INDICATED BELOW

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

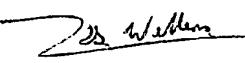
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DWPI: IPC H01M 6/04, 6/06, 6/12 with key words oxygen, air; H01M with key words zinc, oxygen, air, second, further

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, Y	US 2001/0009735 A1 (Yang et al.), 26 July 2001 Page 1, paragraph 10- page 2; paragraph 14, page 2; paragraph 29, page 3, paragraphs 32, 33, 35; page 4 paragraphs 48, 50; claims 1, 5, 22, 26, 43	1- 52
Y	WO 01/91224 A1 (Eveready Battery Company Inc.), 29 November 2001 Whole Document	1- 52
Y	US 6248476 B1 (Sun et al.), 19 July 2001 Whole Document	1- 52

 Further documents are listed in the continuation of Box C See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
12 September 2003Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU03/01165

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	2001000973	JP	11316357	US	6190014		
WO	200191224	AU	200174955	EP	1287578	US	6602629
US	6248476	NONE					
END OF ANNEX							